

Abstract

Process for producing an Si_3N_4 -coated SiO_2 shaped body

A process for producing an Si_3N_4 -coated SiO_2 shaped body from an SiO_2 green body, wherein a precursor which is suitable for forming an Si_3N_4 sintered layer is applied to a surface of the amorphous, open-pore SiO_2 green body, and then the precursor is converted in situ into an Si_3N_4 sintered layer under a laser beam.